

Attorney Docket No.: DEX-0075  
Inventors: Macina and Sun  
Serial No.: 09/618,596  
Filing Date: July 17, 2000  
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In the claims:

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1. (amended) A method for diagnosing the presence of colon cancer in a patient comprising:

(a) determining levels of a colon specific gene(CSG) comprising a polynucleotide sequence of SEQ ID NO:1 or a polynucleotide which hybridizes under stringent conditions with SEQ ID NO: 1, or a polypeptide encoded thereby, in cells, tissues or bodily fluids in a patient; and

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(b) comparing the determined levels of the CSG with levels of the CSG in cells, tissues or bodily fluids measured in a normal human control, wherein a change in determined levels of the CSG in said patient versus levels of the CSG measured in a normal human control is associated with the presence of colon cancer.

2. (amended) A method of diagnosing metastases of colon cancer in a patient comprising:

(a) identifying a patient having colon cancer that is not known to have metastasized;

(b) determining levels of a colon specific gene(CSG) comprising a polynucleotide sequence of SEQ ID NO:1 or a polynucleotide which hybridizes under stringent conditions with SEQ

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ID NO: 1, or a polypeptide encoded thereby, in cells, tissues or bodily fluids in a patient; and

(c) comparing the levels of the CSG determined in step (b) with levels of the CSG measured in a sample of cells, tissues or bodily fluid from a normal human control, wherein an increase in levels of the CSG determined in step (b) as compared to levels of the CSG measured in a sample of cells, tissues or bodily fluid from a normal human control is associated with a cancer that has metastasized.

E1 3. (amended) A method of staging colon cancer in a patient having colon cancer comprising:

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F11 (a) identifying a patient having colon cancer;  
(b) determining levels of a colon specific gene(CSG) comprising a polynucleotide sequence of SEQ ID NO:1 or a polynucleotide which hybridizes under stringent conditions with SEQ ID NO: 1, or a polypeptide encoded thereby, in cells, tissues or bodily fluids in a patient; and

(c) comparing the levels of the CSG determined in step (b) with levels of the CSG measured in a sample of cells, tissues or bodily fluid from a normal human control, wherein an increase in the levels of the CSG determined in step (b) as compared to levels of the CSG measured in a sample of cells, tissues or bodily fluid

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from a normal human control is associated with a cancer that is progressing and a decrease in the levels of the CSG determined in step (b) as compared to levels of the CSG measured in a sample of cells, tissues or bodily fluid from a normal human control is associated with a cancer that is regressing or in remission.

4. (amended) A method of monitoring colon cancer in a patient for the onset of metastasis comprising:

(a) identifying a patient having colon cancer that is not known to have metastasized;

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(b) periodically determining levels of a colon specific gene(CSG) comprising a polynucleotide sequence of SEQ ID NO:1 or a polynucleotide which hybridizes under stringent conditions with SEQ ID NO: 1, or a polypeptide encoded thereby, in cells, tissues or bodily fluids in a patient; and

(c) comparing the periodically determined levels of the CSG with levels of the CSG measured in cells, tissues or bodily fluid of a normal human control, wherein an increase in any one of the periodically determined levels of the CSG in the patient versus the normal human control is associated with a cancer that has metastasized.

5. (amended) A method of monitoring a change in stage of colon cancer in a patient comprising:

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(a) identifying a patient having colon cancer;

(b) periodically determining levels of a colon specific gene(CSG) comprising a polynucleotide sequence of SEQ ID NO:1 or a polynucleotide which hybridizes under stringent conditions with SEQ ID NO: 1, or a polypeptide encoded thereby, in cells, tissues or bodily fluids in a patient; and

(c) comparing the periodically determined levels of the CSG with levels of the CSG measured in cells, tissues, or bodily fluid of a normal human control, wherein an increase in any one of the periodically determined levels of the CSG in the patient versus the normal human control is associated with a cancer that is progressing in stage and a decrease is associated with a cancer that is regressing in stage or in remission.

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